

Canine Primary Hepatocytes

Catalog No. **D-6224**

Suggested Medium: Hepatocyte Medium /w Kit (125 ml)

Catalog No. **M1365**

Product Description

Canine Primary Hepatocytes are derived from the liver tissue of beagle dog. Cells are freshly isolated and shipped at passage 0. Each vial contains 3×10^6 cells. Cells are negative for bacteria, yeast, fungi, and mycoplasma. Canine Primary Hepatocytes are tested for expression of markers using antibodies, ZO-1 by Immunofluorescence Staining. Cells can be expanded on multiwell culture plates ready for experiments under the cell culture conditions specified by *Cell Biologics*.

Laboratory Applications

Canine Primary Hepatocytes can be used in standard biochemical procedures include PCR, Western blotting, immunoprecipitation, metabolism, drug-drug interaction, drug transporter activity toxicity of drug candidates or cell derivatives for desired research applications.

Cell Biologics' Cell Genotype Promise

Cell Biologics has established rigorous genetic quality control and genotyping programs to ensure the normal and genetic background of our cell strains as well as our diseased cell strains with identified diseases (e.g., diabetic cells, hypertensive cells, smoke cells, etc.). *Cell Biologics'* cell strains are only made available to researchers after meeting our standards. Because it is not possible to fully characterize or capture each cell strain in the cell strain data sheets, we cannot guarantee each cell strain's phenotype will meet all expectations. To ensure that *Cell Biologics'* cells will meet the needs of individual research projects or when requesting a cell strain that is new to your research, we suggest ordering and performing tests on a small number of cells (1-2 vials) to determine suitability for your particular project.

Storage of Cell Biologics Products

Cell Biologics ships frozen cells on dry ice. On receipt, immediately transfer frozen cells to liquid nitrogen until ready for experimental use. Live-cell shipment is also available on request. Primary cells should never be kept at -20°C .

Authorized Uses of Cell Biologics Products

Canine Primary Hepatocytes from *Cell Biologics* are distributed for internal research purposes only. Our products are not authorized for human use, for *in vitro* diagnostic procedures, or for therapeutic procedures. Transfer or resale of any *Cell Biologics'* Cells or Products from the purchaser to other markets, organizations, or individuals is prohibited by *Cell Biologics*. *Cell Biologics'* Terms and Conditions must be accepted before submitting an order.

Disclaimer

Investigators should handle the cells that they receive from *Cell Biologics* with caution and treat all animal cells as potential pathogens, since no test procedure can completely guarantee the absence of infectious agents.

Warranty and Liability

Cell Biologics' guarantee applies only to your purchase of *Cell Biologics'* cells with *Cell Biologics'* Media and Coating Solution for appropriate cell culture and cell testing following *Cell Biologics'* online protocols within 35 days from the date of product delivery.

Primary Hepatocyte Culture Protocol

All cell culture procedures must be conducted in a bio-safety cabinet.
Any and all media, supplements, and reagents must be sterilized by filtration through a 0.2 µm filter.
Use aseptic technique to prevent microbial contamination.

Medium

Review the information provided on the *Cell Biologics* website about appropriate culture media (e.g. serum and other supplements). Use pre-warmed (37°C) cell culture media (30-50 ML, Catalog No. M1365, *Cell Biologics*) to seed cells and when changing media.

Coating of Cell Culture Plates or Dishes

Coat sterile culture dishes or flasks with Gelatin Coating Solution (Catalog No. 6950, *Cell Biologics*) for 2 min, then aspirate the excess solution.

Cell Recovery from Cryovial

- Quickly thaw cells in cryo-vial by incubating them in a 37°C water bath for <1 min until there is just a small bit of ice left in the vial.
- Promptly remove the vial and wipe it down with 70% ethanol.
- Transfer cells from the vial to a sterile tube and add 7 ml of pre-warmed *Cell Biologics* Cell Culture Medium (Catalog No. M1365, *Cell Biologics*).
- Carefully pour cell suspension into 2 wells of 6 well dishes (~0.7-1.5 million cells per well of 6-well plate).
- Check plates after seeding cells for 1-5 hrs.
- After cells attached to culture dishes about 70-80% confluence (and/or 50-80% cells attach to a plate), gently aspirate supernatant of the non-adherent cells and add 3 ml of fresh medium of M1365 for each well.
- Change culture medium next day, and daily to remove non-adherent cells.
- Check cells daily under a microscope to verify appropriate cell morphology.

Handling of Arriving Live Cells

- When you receive the live cells in cell culture dishes,
- Gently aspirate half of supernatant from each well.
- Place dishes or plates in a humidified, 5%-CO₂ incubator at 37°C for 30 min.
- Aspirate supernatant and add 3 ml of fresh medium of M1365, *Cell Biologics* for each well of 6-well plate.
- Place dishes or plates in a humidified, 5%-CO₂ incubator at 37°C for 8-12 hours.
- Next day, wash cells once with PBS and add the fresh culture medium until experiments.
- Check cells daily under a microscope to verify appropriate cell morphology.
- Change culture medium daily.

Note

- The cell-seeding density may need to be modified according to user's experience. We always send 1 or 2 extra vials for customers to test the cell-seeding density.
- Please send us the cell images (>80-90% confluence) if you have any question or problem with cultured cells.